

IN THE CLAIMS:

Please cancel claims 1-10, 12-17, 19, and 21, and add new claims 22-38 as follows:

1-21. (Cancelled)

22. (New) An apparatus for vaporizing a solid precursor, comprising:

a housing having an inlet for receiving a carrier gas and an outlet in fluid communication with a sealable interior volume;

at least two surfaces comprising a mesh material contained in the housing having a solid chemical precursor applied thereto, wherein the solid chemical precursor includes a tantalum-containing precursor or a tungsten-containing precursor; and

a heating member in thermal communication with a wall of the housing, wherein at least one of the at least two surfaces is in thermal communication with the wall of the housing.

23. (New) The apparatus of claim 22, wherein the at least two surfaces are spaced to allow passage of the carrier gas therebetween.

24. (New) The apparatus of claim 22, wherein the at least two surfaces are formed of a material selected from the group consisting of stainless steel and ceramic.

25. (New) The apparatus of claim 22, wherein the outlet is configured to operably couple to a reaction chamber of a deposition chamber.

26. (New) The apparatus of claim 25, wherein the deposition chamber is selected from the group consisting of an ALD chamber, a CVD chamber, and an evaporative coating chamber.

27. (New) The apparatus of claim 25, wherein the deposition chamber is an ALD chamber.

28. (New) The apparatus of claim 22, wherein the heating member is contained in the wall of the housing.

29. (New) The apparatus of claim 22, wherein the heating member is contained in one of the at least two surfaces.

30. (New) The apparatus of claim 22, wherein one of the at least two surfaces is coupled to the housing.

31. (New) The apparatus of claim 22, wherein the at least two surfaces have a form selected from the group consisting of an s-shape, a linear shape, and a cone shape.

32. (New) An apparatus for vaporizing a solid precursor, comprising:

a housing having an inlet for receiving a carrier gas and an outlet in fluid communication with a sealable interior volume;

at least two cone shaped surfaces contained in the housing having a solid chemical precursor applied thereto; and

a heating member in thermal communication with a wall of the housing, wherein at least one of the at least two surfaces is in thermal communication with the wall of the housing.

33. (New) The apparatus of claim 32, wherein the at least two surfaces are spaced to allow passage of the carrier gas therebetween.

34. (New) The apparatus of claim 32, wherein the at least two surfaces are formed of a material selected from the group consisting of stainless steel and ceramic.

35. (New) The apparatus of claim 32, wherein the heating member is contained in the wall of the housing.

36. (New) The apparatus of claim 32, wherein the heating member is contained in one of the at least two surfaces.

37. (New) The apparatus of claim 32, wherein one of the at least two surfaces is coupled to the housing.

38. (New) The apparatus of claim 32, wherein the solid chemical precursor includes a tantalum-containing precursor or a tungsten-containing precursor.